IN THE CLAIMS

Please cancel claims 1, 2, 5, 10, 16-19 and 22 without prejudice or disclaimer.

Please amend claims 3, 4, 8, 9, 11, 12, 20, and 23 as follows.

Please add the following new claims 40-49.

For the Examiner's convenience, all pending claims are listed below.

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3. **(Once Amended)** An isolated polynucleotide encoding a polypeptide selected from the group consisting of:

a.) a polypeptide comprising the amino acid sequence of SEQ ID NO:1,

b) a polypeptide comprising a naturally-occurring amino acid sequence at least 90% identical to the amino acid sequence of SEQ ID NO:1,

c) a fragment of a polypeptide having the amino acid sequence of SEQ ID NO:1, said fragment having cyclic nucleotide phosphodiesterase activity, and

d) an immunogentic fragment of a polypeptide having the amino acid sequence of SEQ ID NO:1.

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4. **(Once Amended)** An isolated polynucleotide of claim 3 encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:1.

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6. A recombinant polynucleotide comprising a promoter sequence operably linked to a polynucleotide of claim 3.

duplicate

7. A cell transformed with a recombinant polynucleotide of claim 6.

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8. **(Once Amended)** A method for producing a polypeptide encoded by the polynucleotide of claim 3, the method comprising:

a) culturing a cell under conditions suitable for expression of the polypeptide, wherein said cell is transformed with a recombinant polynucleotide, and said recombinant poynucleotide comprises a promoter sequence operably linked to a polynucleotide of claim 3, and

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b) recovering the polypeptide so expressed.

9. **(Once Amended)** A method of claim 8, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO:1.

11. **(Once Amended)** An isolated polynucleotide selected from the group consisting of:

a) a polynucleotide comprising the polynucleotide sequence of SEQ ID NO:2,

b) a polynucleotide comprising a naturally-occurring polynucleotide sequence at least 90% identical to the polynucleotide sequence of SEQ ID NO:2,

c) a polynucleotide complementary to a polynucleotide of a),

d) a polynucleotide complementary to a polynucleotide of b) and

e) an RNA equivalent of a)-d).

12. **(Once Amended)** An isolated polynucleotide comprising at least 60 contiguous nucleotides of a polynucleotide of claim 11.

13. A method for detecting a target polynucleotide in a sample, said target polynucleotide having a sequence of a polynucleotide of claim 11, the method comprising:

a) hybridizing the sample with a probe comprising at least 20 contiguous nucleotides comprising a sequence complementary to said target polynucleotide in the sample, and which probe specifically hybridizes to said target polynucleotide, under conditions whereby a hybridization complex is formed between said probe and said target polynucleotide or fragments thereof, and

b) detecting the presence or absence of said hybridization complex, and, optionally, if present, the amount thereof.

14. A method of claim 13, wherein the probe comprises at least 60 contiguous nucleotides.

15. A method for detecting a target polynucleotide in a sample, said target polynucleotide having a sequence of a polynucleotide of claim 11, the method comprising:

a) amplifying said target polynucleotide or fragment thereof using polymerase chain reaction amplification, and

b) detecting the presence or absence of said amplified target polynucleotide or fragment thereof, and, optionally, if present, the amount thereof.

20. **(Once Amended)** A method for screening a compound for effectiveness in altering expression of a target polynucleotide, wherein said target polynucleotide comprises a polynucleotide sequence of claim 23, the method comprising:

a) exposing a sample comprising the target polynucleotide to a compound, under conditions suitable for the expression of the target polynucleotide,

b) detecting altered expression of the target polynucleotide, and

c) comparing the expression of the target polynucleotide in the presence of varying amounts of the compound and in the absence of the compound.

21. A method for assessing toxicity of a test compound, said method comprising:

a) treating a biological sample containing nucleic acids with the test compound;

b) hybridizing the nucleic acids of the treated biological sample with a probe comprising at least 20 contiguous nucleotides of a polynucleotide of claim 11 under conditions whereby a specific hybridization complex is formed between said probe and a target polynucleotide in the biological sample, said target polynucleotide comprising a polynucleotide sequence of a polynucleotide of claim 11 or fragment thereof;

c) quantifying the amount of hybridization complex; and

d) comparing the amount of hybridization complex in the treated biological sample with the amount of hybridization complex in an untreated biological sample, wherein a difference in the amount of hybridization complex in the treated biological sample is indicative of toxicity of the test compound.

23. **(Once Amended)** A polynucleotide of claim 11, comprising the polynucleotide sequence of SEQ ID NO:2.

40. **(New)** A microarray wherein at least one element of the microarray is a polynucleotide of claim 12.

41. **(New)** An array comprising different nucleotide molecules affixed in distinct physical locations on a solid substrate, wherein at least one of said nucleotide molecules comprises a first oligonucleotide or polynucleotide sequence specifically hybridizable with at least 30 contiguous nucleotides of a target polynucleotide, and wherein said target polynucleotide is a polynucleotide of claim 11.

42. **(New)** An array of claim 41, wherein said first oligonucleotide or polynucleotide sequence is completely complementary to at least 30 contiguous nucleotides of said target polynucleotide.

43. **(New)** An array of claim 41, wherein said first oligonucleotide or polynucleotide sequence is completely complementary to at least 60 contiguous nucleotides of said target polynucleotide.

44. **(New)** An array of claim 41, wherein said first oligonucleotide or polynucleotide sequence is completely complementary to said target polynucleotide.

45. **(New)** An array of claim 41, which is a microarray.

46. **(New)** An array of claim 41, further comprising said target polynucleotide hybridized to a nucleotide molecule comprising said first oligonucleotide or polynucleotide sequence.

47. **(New)** An array of claim 41, wherein a linker joins at least one of said nucleotide molecules to said solid substrate.

48. **(New)** An array of claim 41, wherein each distinct physical location on the substrate

contains multiple nucleotide molecules, and the multiple nucleotide molecules at any single distinct physical location have the same sequence, and each distinct physical location on the substrate contains nucleotide molecules having a sequence which differs from the sequence of nucleotide molecules at another distinct physical location on the substrate.

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49. **(New)** A method of generating an expression profile of a sample which contains polynucleotides, the method comprising:

a) labeling the polynucleotides of the sample,

b) contacting the elements of the microarray of claim 40 with the labeled polynucleotides of the sample under conditions suitable for the formation of a hybridization complex, and

c) quantifying the expression of the polynucleotides in the sample.